CLAIMS

What is claimed is:

1. A short-range wireless communication system, comprising:

a host controller interface provided with a handoff buffer for buffering at least one of Host Controller Interface (HCI) data and transmission data, and for exchanging said at least one of HCI data and transmission data with an external device;

a microcontroller for forwarding to a new Access Point (AP) said at least one of HCI data and transmission data buffered in the handoff buffer if a message indicating setup completion of a connection with the external device is transmitted from the new AP after a handoff occurs as the external device moves, in a state where the new AP is interlinked with the external device.

2. The short-range wireless communication system as claimed in claim 1, wherein the microcontroller deletes said at least one of HCI data and transmission data buffered in the handoff buffer if an acknowledge ACK message for said at least one of the HCI data and the transmission data transmitted from the external device, is received.

3. The short-range wireless communication system as claimed in claim 2, wherein the microcontroller maintains said at least one of HCI data and transmission data buffered in the handoff buffer if the acknowledge ACK message for the data transmitted from the external device, is not received.

4. The short-range wireless communication system as claimed in claim 3, wherein, if the microcontroller newly linked with a third external device receives said at least one of HCI data and the transmission data from a different AP, the microcontroller transmits said at least one of HCI data and the transmission data to the third external device immediately.

5. A handoff processing method for a short-range wireless communication system, comprising steps of:

storing in a handoff buffer at least one of Host Controller Interface (HCI) data and transmission data upon communications with an interlinked external device in a state where a new Access Point (AP) is interlinked with the external device; and

forwarding to the new Access Point (AP) said at least one of HCI data and the transmission data buffered in the handoff buffer if a message indicating setup completion of a connection with the external device is transmitted from the new AP after a handoff occurs as the external device moves.

6. The handoff processing method as claimed in claim 5, further comprising a step of deleting said at least one of HCI data and transmission data buffered in the handoff buffer if an acknowledge (ACK) message for said at least one of the HCI data and the transmission data transmitted from the external device, is received.

7. The handoff processing method as claimed in claim 6, further comprising a step of maintaining said at least one of the HCI data and the transmission data buffered in the handoff buffer if the acknowledge (ACK) message for the data transmitted from the external device, is not received.

8. The handoff processing method as claimed in claim 5, further comprising a step of, if receiving said at least one of HCI data and transmission data from a different AP in a state of being newly linked with a third external device, immediately transmitting said at least one of the HCI data and the transmission data to the third external device.

9. A Bluetooth system, comprising:

a host controller interface provided with a baseband buffer for buffering at least one of Host Controller Interface (HCI) data and transmission data, and for exchanging said at least one of said HCI data and the transmission data with an external device;

a microcontroller for forwarding to a new Access Point (AP) said at least one of the HCI data and the transmission data buffered in the baseband buffer if an Inter Network Access Point (NAP) Communication (INC) acknowledge ACK message is transmitted from the new AP after a handoff occurs as the external device moves, in a state where the new AP is interlinked with the external device.

10. The Bluetooth system as claimed in claim 9, wherein the microcontroller deletes said at least one of the HCI data and the transmission data buffered in the baseband buffer if a baseband ACK from the external device is received.

11. The Bluetooth system as claimed in claim 10, wherein the microcontroller maintains said at least one of the HCI data and the transmission data buffered in the baseband buffer if the baseband ACK is not received.

12. The Bluetooth system as claimed in claim 9, wherein, if the microcontroller newly linked with a third external device receives said at least one of HCI data and the transmission data from a different AP, the microcontroller transmits said at least one of HCI data and the transmission data to the third external device immediately.

13. A handoff processing method for a Bluetooth system, comprising steps of:

storing in a handoff buffer at least one of HCI data and transmission data upon communications with an external device, in a state where a new Access Point (AP) is interlinked with the external device; and

forwarding to the new Access Point (AP) said at least one of the HCI data and the transmission data buffered in the baseband buffer if an INC ACK

message is transmitted from the new AP after a handoff occurs as the external device moves.

14. The handoff processing method as claimed in claim 13, further comprising a step of deleting said at least one of the HCI data and the transmission data buffered in the baseband buffer if a baseband acknowledge (ACK) message is received from the external device.

15. The handoff processing method as claimed in claim 14, further comprising a step of maintaining said at least one of the HCI data and the transmission data buffered in the baseband buffer if the baseband ACK message is not received from the external device.

16. The handoff processing method as claimed in claim 13, further comprising a step of, if receiving said at least one of HCI data and transmission data from a different AP in a state of being newly linked with a third external device, immediately transmitting said at least one of the HCI data and the transmission data to the third external device.